LISTING OF THE CLAIMS

2 CLAIMS

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- 3 We claim:
- 4 1. (currently amended) An apparatus comprising:
- 5 a buffer for storing indications of interrupts generated by a plurality of ports of a peripheral
- 6 device, the peripheral device having a plurality of ports; said apparatus for transferring interrupts
- 7 from the peripheral device to a host computer system, and
- 8 a controller for, in response to a preset condition being met, generating a control data block
- 9 comprising a payload portion having a plurality of fields each corresponding to a port from said
- 10 plurality of ports and a header portion having an identifier for identifying the control data block,
- moving the contents of the buffer to the payload portion of the control data block, and sending
- 12 the control data block to the host computer system via one port of the plurality of ports.
- 13 2. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a
- 14 determination that the buffer is full.
- 15 3. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a
- 16 determination that at least a predetermined plurality of indications is stored in the buffer and that a
- 17 predetermined period has elapsed.
- 18 4. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a
- 19 determination that at least one indication is stored in the buffer and that a predetermined period
- 20 has elapsed.

- 1 5. (Previously presented) An apparatus as claimed in claim 1, wherein the header portion
- 2 comprises a count indicative of the number of indications included in the payload portion.
- 3 6. (original) An apparatus as claimed in claim 1, wherein the header portion comprises a time of
- 4 day stamp.
- 5 7. (original) An apparatus as claimed in claim 1, wherein the buffer comprises a first in first out
- 6 memory buffer.
- 7 8. (currently amended) A peripheral communications device comprising the apparatus as claimed
- 8 in claim 1.
- 9. (currently amended) A data communications network interface comprising the peripheral
- 10 communications device as claimed in claim 8.
- 11 10. (currently amended) An apparatus as claimed in claim 1, further comprising:
- 12 a host processing system having a memory, a data communications interface for communicating
- data between the host computer system and a data communications network, forming a data
- 14 processing system for controlling flow of interrupts from the data communication interface to the
- 15 memory of the host computer processing system.
- 16 11. (currently amended) A method comprising transferring interrupts from a peripheral device to a
- 17 host computer system, the peripheral device having a plurality of ports, the step steps of
- 18 transferring interrupts comprising:
- 19 storing interrupts generated by said ports of the peripheral device in a buffer;
- 20 determining if a preset condition is met, and, in response to the preset condition being met;

- 1 generating a control data block comprising a payload portion having a plurality of fields each
- 2 corresponding to a different one of the port from said plurality of ports and a header portion
- 3 having an identifier for identifying the control data block:
- 4 moving the contents of the buffer to the corresponding fields of the payload portion; and
- 5 sending the control data block to the host computer system via one of the ports.
- 6 12. (original) A method as claimed in claim 11, wherein the step of determining if the preset
- 7 condition is met comprises determining if the buffer is full.
- 8 13. (original) A method as claimed in claim 11, wherein the step of determining if the preset
- 9 condition is met comprises determining if at least a predetermined plurality of indications is stored
- 10 in the buffer and if a predetermined period has elapsed.
- 11 14. (original) A method as claimed in claim 11, wherein the step of determining if the preset
- 12 condition is met comprises determining if at least one indication is stored in the buffer and
- 13 if a predetermined period has elapsed.
- 14 15. (original) A method as claimed in claim 11, wherein the header portion comprises a count
- 15 indicative of the number of indications included in the payload portion.
- 16 (original) A method as claimed in claim 11, wherein the buffer comprises a first in first out
- 17 memory buffer.
- 18 17. (currently amended) A computer program product comprising a computer usable medium
- 19 having computer readable program code means embodied therein for causing transfer of
- 20 interrupts, the computer readable program code means in said computer program product
- 21 comprising computer readable program code means for causing a computer to effect the all
- 22 functions of all the elements the apparatus of claim 1.

- 1 18. (currently amended) A computer program product comprising a computer usable medium
- $2\qquad \text{having computer readable program code means embodied therein for causing data processing, the}\\$
- 3 computer readable program code means in said computer program product comprising computer
- 4 readable program code means for causing a computer to effect the all functions of all the elements
- 5 the apparatus of claim 10.
- 6 19. (currently amended) An article of manufacture comprising a computer usable medium having
- 7 computer readable program code means embodied therein for causing transfer of interrupts, the
- 8 computer readable program code means in said article of manufacture comprising computer
- 9 readable program code means for causing a computer to effect all the steps and all the limitations
- 10 of the steps of the method of claim 11.
- 11 20. (currently amended) A program storage device readable by a machine, tangibly embodying a
- 12 program of instructions executable by the machine to perform method steps for transferring
- 13 interrupts, said method steps comprising all the steps and all the limitations of the steps of the
- 14 method of claim 11.
- 15 21. (previously presented) An apparatus as claimed in claim 1, wherein:
- 16 the preset condition comprises at least one of:
- 17 a determination that the buffer is full,
- a determination that at least a predetermined plurality of indications is stored in the buffer
- 19 and that a predetermined period has elapsed, and
- 20 determination that at least one indication is stored in the buffer and that a predetermined
- 21 period has elapsed;
- 22 the header portion comprises a count indicative of the number of indications included in the
- 23 payload portion:
- 24 the header portion comprises a time of day stamp; and

- 1 the buffer comprises a first in first out memory buffer.
- 2 22. (currently amended) An apparatus as claimed in claim 21, further comprising:
- 3 a host processing system having a memory, a data communications interface for communicating
- 4 data between the host computer system and a data communications network, forming a data
- 5 processing system for controlling flow of interrupts from the data communication interface to the
- 6 memory of the host eomputer processing system.